

extraordinary tendency to the development of empyema in infections with pneumococci of Type I. Almost 38 per cent with this type of infection developed this complication, and this was six times greater than any other cause of empyema.

Mongolian Idiocy in One of Twins.—McCLEAN (*Jour. Am. Med. Assn.*, January 7, 1922) reports an instance. He says that since the original description of Mongolian idiocy by Down and the more complete description by Kassowitz there has been but small addition to the knowledge of this condition. The etiology is unknown. Attempts have been made to assign syphilis as a cause, but reports of positive Wassermann reactions in certain Mongolian idiots have never misled the careful clinician. The extremes of age in either parents have also been considered, but Goddard in an analysis of more than 290 cases found that the ages of fathers of Mongolians varied from twenty to sixty-three years. He found that the number of Mongolians born of mothers of forty years was much higher than at any other age. In 30 cases reviewed by von Hofe the mother was less than thirty-five years of age in 47 per cent. Consequently any influence of the age of either parent seems to have no foundation of fact. Goddard inclines to the belief of many others that the condition of the mother during pregnancy has a strong influence upon the development of this condition. If this is true the same changes are to be expected in both twins. Such a result was seen in the cases of Hjorth. Seven other cases similar to this one have been found in the literature. Instances of more than one case of Mongolian idiocy in the same family have been reported, the most recent being that of Pardee, who suggests the endocrine disturbance as the probable cause. If there was an endocrine disturbance in the mother in the case here reported, which might manifest itself in a Mongolian offspring, it would naturally be expected that the other twin be similarly afflicted. The author suggests the following explanation: Two ova were fertilized by two spermatozoa; one of the ova was fertilized by a normal spermatozoön and resulted in the normal child; the other ovum may have been abnormal and have been fertilized by a normal spermatozoön, or may have been normal and fertilized by an abnormal spermatozoön. This fertilization resulted in the Mongolian idiot.

The Cure of Infantile Rickets by Sunlight.—Hess and GUTMAN (*Jour. Am. Med. Assn.*, January 7, 1922) treated their patients by direct sunlight for from one-half to several hours, the period varying according to the sun's intensity, weather conditions and the condition of the baby. They point out that the important factor is the use of the direct rays of the sun without any interference by clothing or window-glass. The explanation of this is that the curative rays seem to be filtered out by passage through other media. In a previous communication they pointed out that this treatment cannot be routine but must be varied according to the condition of the babies, some being far more sensitive to sunlight than others. It is important that the babies be kept warm. It was found sufficient to expose the legs and arms, although it is preferable when the temperature permits to expose the trunk as well. Prior to treatment the majority of this

series showed clinical symptoms of mild rickets, such as beading of the ribs and the characteristic changes in the epiphyses as seen in roentgen-ray examination. They all received the customary milk mixtures as well as orange juice, and the older ones received cereals as well. In every case in which heliotherapy was used the rickets diminished and the general condition improved. The inorganic phosphate of the blood increased as it does also under the administration of cod-liver oil, which must be considered a specific for this condition. The experience of the authors did not justify any conclusions as regards the acid-soluble and the total phosphorus.

The Prevention of Rickets in Rats by Sunlight.—POWERS, PARK, SHIPLEY, MCCOLLUM and SIMMONDS (*Jour. Am. Med. Assn.*, January 21, 1922) undertook this study to determine whether or not sunlight would prevent the development of rickets in rats. A diet was used which at room light regularly gave rise to a disease in its essential features identical with rickets of human beings. The diet was high in calcium, low in phosphorus and was insufficiently supplied with fat-soluble vitamin A. In other ways it was well constituted. Eighteen rats were placed on this diet. Twelve were exposed to sunlight for a total of two hundred and forty-two hours over a period of sixty-two days. Six were kept under conditions of ordinary room light as control animals. The control rats killed with ether at the end of sixty days all showed rickets. The rats exposed to sunlight remained without exception entirely free from rickets as confirmed by histologic examination. The beneficial effect of the rays of the sun was not limited to the skeleton, as the general condition of the animals underwent an improvement under the influence of the sunlight. The exposure to the sun's rays did not entirely compensate for the defects of the diet. Though the sunlight did not alter the defects in the diet, it permitted the animals to thrive to a limited extent in the presence of the diet. The sunlight somehow raises the efficiency of the body cells. The effects of sunlight and of cod-liver oil seemed to be identical.

OBSTETRICS

UNDER THE CHARGE OF

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Experimental Studies in the Toxicity of Placental Lipoids and the Cause of Puerperal Eclampsia.—SCHOENFELD (*Arch. f. Gynäk.*, 1921, cv, 80) contributes an interesting article to the literature already existing, indicating that substances in the placenta are active in causing eclampsia. He finds that extracts from the placenta made with alcohol, acetone or glycerin contain a poisonous material which produces